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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,200	09/12/2003	Steve Klotz	15436.252.1.1	7200

22913 7590 04/23/2007

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EXAMINER	
MASKULINSKI, MICHAEL C	
ART UNIT	**PAPER NUMBER**
2113	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/661,200	KLOTZ ET AL.	
	Examiner	Art Unit	
	Michael C. Maskulinski	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-15 and 17-21* is/are rejected.

7)☒ Claim(s) *16 and 22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Final Office Action

Double Patenting

1. In response to the terminal disclaimer filed, the rejection of claims 1, 3, 10, 13, 17, 18, 20, 21, and 22, on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,2, 5, 9, 11, 14, 16, 17, and 18 of copending Application No. 10/661,705, has been withdrawn.

2. In response to the terminal disclaimer filed, the rejection of claims 1 and 3, on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7, 8, 9, 12, 14, and 16 of copending Application No. 10/661,907, has been withdrawn.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-15 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al., U.S. Patent 5,850,388.

Referring to claim 1:

a. In column 8, lines 43-52, Anderson et al. disclose a protocol analyzer instrument (positioning an analyzer in communication with the network).

b. In column 9, lines 16-21, Anderson et al. disclose that data-bearing frames are transmitted over the network and are received and analyzed by Embedded Code executed by a Protocol Analyzer Instrument using one or more RISC

processors and hard-wired analyzer circuits within the Protocol Analyzer Instrument (capturing a data trace of the network with the analyzer).

c. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument. Further, in column 11, lines 5-17, Anderson et al. disclose determining station-level statistics by analyzing source and destination addresses in the packet (determining a network device topology from a first processing of the data trace).

d. In Figure 1, Anderson et al. disclose network protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of said packets in real time (building user layer protocols). In column 10, lines60-65 continued in column 11, lines 1-17, Anderson et al. disclose computing statistics (protocol analyzing) for each station (a determined device topology) using the source and destination addresses (using a second processing of the data trace and the determined device topology).

e. In column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number_of errors for each type of error detected for the corresponding station (determining errors in the network

device topology using protocol experts applied to the user layer protocols in conjunction with the determined device topology).

f. In column 23, lines 58-67, Anderson et al. disclose displaying at least one of the device topology and the determined errors to a user.

Referring to claim 2, in column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (wherein capturing the trace data comprises capturing and storing trace data for a first channel and a second channel of the analyzer, the data for the first and second channels being stored independently).

Referring to claims 3 and 18, in column 16, lines 59-63, Anderson et al. disclose that the distribution and percentage distribution of the various protocols present in data frames are hereinafter referred to as "protocol distribution". The calculation of protocol distribution is performed by the embedded code executed by the protocol analyzer instrument (wherein building the user layer protocols comprises: a) stripping a specific protocol layer from a data sample; b) sending the specific protocol layer from the data sample to a software expert configured to analyze the specific protocol layer; and c) repeating steps (a) and (b) until each protocol layer of the data sample, has been processed by a designated software expert).

Referring to claim 4, in column 1, lines 34-47, Anderson et al. disclose different network topologies that are monitored (wherein determining the network device

topology comprises analyzing channelized captured trace data to extrapolate information indicative of loops, switches, and switched loops).

Referring to claim 5, in column 10, lines 60-65, Anderson et al. teach wherein determining errors further comprises determining warnings.

Referring to claim 6, in column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument (wherein determining errors further comprises determining at least one performance metric related to the determined topology and the specific user layer protocol).

Referring to claims 7 and 20, in column 23, lines 7-9, Anderson et al. disclose that the user can select how often network information is updated, i.e. how often the UI requests updates from the embedded code on these parameters (wherein displaying at least one of the device topology and the determined errors to a user comprises displaying a graphical user interface (GUI) to the user, wherein the GUI is configured to receive input from the user to adjust a processing window in the data trace).

Referring to claim 8, in Figure 21, Anderson et al. teach displaying the determined network device topology.

Referring to claim 9, in Figures 18-21, Anderson et al. disclose displaying at least one of an error log, a metrics graph view, and a report view.

Referring to claim 10:

a. In column 7, lines 60-65, Anderson et al. disclose that the present invention may comprise a plurality of protocol analyzer instruments, each having a RISC processor and each monitoring a different segment of a network or monitoring the same network or segment but at a different port or station on the network (collecting a plurality of data traces from the data network with a plurality of network analyzers).

b. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument. Further, in column 11, lines 5-17, Anderson et al. disclose determining station-level statistics by analyzing source and destination addresses in the packet (determining a topology of the data network via analysis of a combination of the plurality of data traces).

c. In Figure 1, Anderson et al. disclose network protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of said packets in real time (building user layer protocols). In column 10, lines60-65 continued in column 11, lines 1-17, Anderson et al. disclose computing statistics (protocol analyzing) for each station (a determined device topology) using the source and destination addresses (processing the combination of the plurality of data traces in conjunction with the determined topology to rebuild user layer protocols).

d. In column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number of errors for each type of error detected for the corresponding station (processing individual protocols to determine errors, warnings, and metrics for the particular protocol).

e. In Figures 18-21, Anderson et al. disclose displaying the errors, warnings, and metrics to the user via a graphical interface.

Referring to claim 11, in column 7, lines 60-65, Anderson et al. disclose that the present invention may comprise a plurality of protocol analyzer instruments, each having a RISC processor and each monitoring a different segment of a network or monitoring the same network or segment but at a different port or station on the network (wherein collecting data traces further comprises selectively positioning the plurality of analyzers to capture data traveling between targets and initiators).

Referring to claim 12, in column 12, lines 7-15, Anderson et al. disclose updating the error_statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network topology. It contains the error_id and the number of errors for each type of error detected for the Corresponding station (wherein determining topology comprises

stepping through channelized data stored from the plurality of data traces to extrapolate information therefrom that indicates the presence of specific network devices).

Referring to claim 13, in column 5, lines 35-44, Anderson et al. teach wherein processing to rebuild user layer protocols comprises stripping each protocol layer from a data sample, analyzing the stripped protocol layer with an expert configured to analyze the stripped protocol layer, and sending the remaining portions of the data sample to additional protocol experts for analysis and forwarding of the data sample until each layer of the data sample has been analyzed by an appropriate protocol layer expert.

Referring to claims 14 and 19, in column 5, lines 9-13, Anderson et al. disclose monitoring in real time one or more selected and assorted network parameters and comparing the results of said analysis with arbitrary threshold values for said parameters to determine if the transmission on the network is exceeding said threshold so as to constitute an event (wherein processing individual protocols to determine errors for the particular protocol further comprises comparing protocol specific commands to protocol standards to determine if an error has occurred).

Referring to claim 15, in Figures 18-21, Anderson et al. disclose displaying at least one of a graphical metric view, a topology view, and an error log view to a user.

Referring to claim 17:

a. In column 9, lines 16-21, Anderson et al. disclose that data-bearing frames are transmitted over the network and are received and analyzed by Embedded Code executed by a Protocol Analyzer Instrument using one or more RISC

processors and hard-wired analyzer circuits within the Protocol Analyzer Instrument (capturing at least one bidirectional data trace from the network).

b. In column 10, lines 50-53, Anderson et al. disclose as station-level statistics for each station operating on the network are calculated, they are stored in an array called the "station list array" in the memory of the protocol analyzer instrument. Further, in column 11, lines 5-17, Anderson et al. disclose determining station-level statistics by analyzing source and destination addresses in the packet (determining a topology of the data network via analysis of a combination of the plurality of data traces).

c. In Figure 1, Anderson et al. disclose network protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of said packets in real time (building user layer protocols). In column 10, lines60-65 continued in column 11, lines 1-17, Anderson et al. disclose computing statistics (protocol analyzing) for each station (a determined device topology) using the source and destination addresses (analyzing the bidirectional data trace to extrapolate information indicative of network topology and analyzing individual data samples from the data trace using the network topology to rebuild user layer protocols for the individual data sample).

d. In column 12, lines 7-15, Anderson et al. disclose updating the error statistics subarray of the entry in the station list array corresponding to the source address. The error_statistics array variable is actually a subarray whose length depends upon the number of types of errors detected for the particular network

topology. It contains the error id and the number_of errors for each type of error detected for the corresponding station (determining errors in the network using the network topology, the user layer protocols, and standards for the particular user layer protocols).

Referring to claim 21, in Figures 18 and 19 A-C, Anderson et al. disclose calculating and displaying network performance metrics to the user.

Allowable Subject Matter

5. Claims 16 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed February 16, 2007 have been fully considered but they are not persuasive.

7. On page 8, under section **a. claims 1-9**, the Applicant argues that the limitation "...building user layer protocols using a second processing of the data trace and the determined device topology..." has not been properly rejected. The Examiner respectfully disagrees. The cited section shows a creation of a station list through analyzing source and destination addresses (determining a device topology based on a first processing) and then for each station there is associated statistics. Throughout the patent, Anderson et al. discloses protocol analyzing. Figure 1 shows protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of

the packets. Anderson et al. disclose building user layer protocols by analyzing the packets and then associating statistics with each station based on analysis of the addresses (the determined device topology.

8. On pages 8-9, under section **a. claims 1-9**, the Applicant argues, "Correspondingly, the passage cited by the Examiner as purportedly disclosing the claim 1 limitation '...determining errors in the network device topology using protocol experts in conjunction with the determined device topology...' does not appear to support the contentions of the Examiner. Particularly, while the cited passage of Anderson refers to an '...error_statistics array variable ... whose length depends upon the number of errors detected for the particular *network topology*.' (col. 12, lines 8-12) (emphasis added by Applicant), that passage makes no reference to a 'network *device* topology' as required by claim 1, much less any reference to the '...[determination of] errors' through the use of '...protocol experts applied to the user layer protocols in conjunction with the determined device topology' (emphasis added) as claim 1 requires." The Examiner disagrees. The Examiner would like to know exactly what the difference between a network topology and a network *device* topology is. The Examiner would like to remind the Applicant that because the exact same terminology isn't used, that it doesn't mean it is the same thing. Further, as pointed out above, throughout the reference of Anderson et al. protocol analyzers are discussed and as shown in Figure 1 there are protocol layers and in column 4, lines 62-63, Anderson et al. disclose identifying the protocol portions of the packets. For at least these reasons, Anderson et al. disclose protocol experts applied to the user layer protocols. Also, as disclosed in

column 12, lines 8-12, there is a network topology and errors are associated with specific devices in the topology.

9. On pages 9-10, under section **b. claims 10-16**, the Applicant argues, "Notwithstanding the assertion of the Examiner, it seems clear that the cited passage of Anderson recites nothing more than the calculating and storage of statistics, and does not appear to make any reference whatsoever to 'rebuild[ing] user layer protocols,' much less to a user layer protocol rebuilding process that is implemented by '...processing the combination of the plurality of data traces in conjunction with the determined [network] topology...'" The Examiner respectfully disagrees for at least the reasons given above in paragraphs 7 and 8.

10. On page 10, under section **c. claims 17-22**, the Applicant argues, "Notwithstanding the assertion of the Examiner, it seems clear that the cited passage of Anderson recites nothing more than the calculation and storage of statistics, and does not appear to make any reference whatsoever to any sort of analysis process, much less to 'analyzing bidirectional data to extrapolate information indicative of network topology' as claim 17 requires." The Examiner respectfully disagrees. In column 11, lines 5-17, Anderson et al. disclose determining stations by analyzing source and destination addresses in packets.

11. On page 10, under section **c. claims 17-22**, the Applicant argues, "it is not apparent that the cited passage of Anderson makes any reference to 'analyzing individual data samples from the data trace using the network topology to rebuild user

layer protocols for the individual samples...' as claim 17 also requires." The Examiner respectfully disagrees for at least the reasons given above in paragraph 7.

12. In conclusion, the Examiner would like to remind the Applicant that he/she is responsible for the entire reference cited in the rejection and not just the cited sections.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art is related to SANmetrics.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Maskulinski whose telephone number is 571-272-3649. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael C Maskulinski
Examiner
Art Unit 2113